

AMENDMENTS TO THE CLAIMS

Claims 1-9 (Cancelled)

10. (Currently Amended) An inflatable airbag cushion having multiple fabric layers and closely spaced interconnected woven in joints that resist gas permeation, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers each having a plurality of yarns running in the weft direction and a plurality of yarns running in the warp direction,

(b) a first interconnected joint and a second interconnected joint, said first and second interconnected joints running generally parallel ~~and in the warp direction~~ to each other, said first and second interconnected joints each forming a woven union of said first and second woven fabric layers along the length of said interconnected joints, the number of yarns ~~running in the warp direction~~ positioned between said first and second interconnected joints being no more than about twelve yarns in said first layer and no more than about twelve yarns in said second layer;

(c) at least some of said weft yarns comprising crossover yarns, ~~said crossover yarns of~~ said first layer switching from a position within said first layer to a position within said second layer at said first interconnected joint, said crossover yarns further switching from a position within said second layer to a position within said first layer at said second interconnected joint; and

(d) wherein said crossover yarns are substantially free of floats at said interconnected joints.

11. (Currently Amended) The airbag cushion of claim 10 wherein the number of yarns ~~extending in the warp direction~~ positioned between said first and second interconnected joints is between about 2 and 12 for each of said layers.

12. (Currently Amended) The airbag cushion of claim 10 wherein the number of yarns ~~in the warp direction~~ positioned between said first and second interconnected joints is no more than about eight yarns for each of said layers.

13. (Currently Amended) The airbag cushion of claim 12 wherein the number of said yarns ~~in said warp direction~~ positioned between said joints is between about 2 and about 4 yarns for each of said first and second layers.

14. (Original) The airbag cushion of claim 10 wherein said crossover yarns are provided in a plain weave configuration that extends across said joints.

15. (Currently Amended) The airbag cushion of claim 10 wherein in the weft direction each of said crossover yarns passes alternately over and under each of ~~said~~ successive warp yarns in each of said joints.

16. (Original) The inflatable airbag cushion of claim 13 wherein said crossover yarns are provided in a plain weave.

17. (Cancel)

18. (Currently Amended) An inflatable airbag cushion having multiple layers and closely spaced interconnected woven in joints, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers each having a plurality of first yarns extending in a first direction and a plurality of second yarns extending in a second direction, said second direction being perpendicular to said first direction,

(b) a first interconnected joint and a second interconnected joint, said first and second interconnected joints extending generally parallel ~~and in the first direction~~ to each other, said first and second interconnected joints each forming a woven seam joining said first and second

woven fabric layers along the length of said interconnected joints, wherein the number of first yarns ~~extending in the first direction~~ positioned between said first and second interconnected joints is between about two and twelve yarns in each of said first and second layers,

(c) wherein said second joints are defined by yarns alternating from a position in said first layer to a position in said second layer, ~~further wherein said second~~ yarns are provided in a plain weave, said plain weave being maintained across each of said interconnected joints.

19. (Currently Amended) The inflatable airbag cushion of claim 18 wherein the number of first yarns ~~running in said first direction~~ between said first and said second interconnected joints is between about two and about eight yarns for each of said layers.

20. (Original) The inflatable airbag cushion of claim 19 wherein the number of said first yarns is between about two and about four yarns.

21. (Cancel)

22. (Currently Amended) The inflatable airbag cushion of claim ~~24~~18 wherein said first and second layers are ~~essentially independent of each other, said first and second layers being~~ generally free from yarn interconnections at locations which are between said first and second interconnected joints.

23. (Currently Amended) An inflatable airbag cushion comprising a woven fabric of dobby construction, said fabric comprising an inflating portion ~~and a non-inflating portion~~, wherein said airbag cushion comprises woven in joints, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers each having a plurality of first yarns running in a first direction and a plurality of second yarns running in a second direction, said second direction being perpendicular to said first direction,

(b) a first interconnected joint and a second interconnected joint, said first and second interconnected joints running generally parallel and in the first direction, said first and second interconnected joints each forming a woven seam joining said first and second woven fabric layers along the length of said interconnected joints, wherein the number of first yarns running in the first direction positioned between said first and second interconnected joints is between about two and twelve yarns for each of said first and second layers, and

(c) said second yarns alternating from a position in said first layer to a position in said second layer, further wherein said second yarns are provided in a plain weave, said plain weave being maintained by said second yarns across said interconnected joints.

24. (Currently Amended) An inflatable airbag cushion comprising a woven fabric of jacquard construction, said fabric comprising an inflating portion ~~and a non-inflating portion~~, wherein said airbag cushion comprises woven in joints, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers each having a plurality of first yarns running in a first direction and a plurality of second yarns running in a second direction, said second direction being perpendicular to said first direction,

(b) a first interconnected joint and a second interconnected joint, said first and second interconnected joints running generally parallel ~~and in the first direction~~ to each other, said first ~~and second interconnected~~ joints each forming a woven seam joining said first and second woven fabric layers along the length of said interconnected joints, wherein the number of first yarns ~~running in the first direction~~ positioned between said first and second interconnected joints is between about two and twelve yarns for each of said first and second layers, and

(c) said ~~second~~ yarns alternating from a position in said first layer to a position in said second layer, further wherein said second yarns are provided in a plain weave, said plain weave being maintained by said second yarns across said interconnected joints; and

(d) wherein said interconnected joints are provided in a curved format in a jacquard weave.

25. (Currently Amended) An inflatable airbag cushion having closely spaced woven in joints, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers each having:

i) a plurality of first yarns running in a first direction and

ii) a plurality of second yarns running in a second direction, wherein said second direction is perpendicular to said first direction;

(b) a first joint and a second joint, said first and second joints extending generally parallel ~~and in said first direction to each other~~, said first and said second joints comprising regions of yarn ~~entanglement~~ interlacement which associate said first and second woven layers to each other, wherein between about 2 and about 12 generally parallel first yarns are provided in said first direction between said first and second joints for each of said layers, thereby forming a relatively small distance between said first and second joints, said relatively small distance contributing to the gas impermeability of said inflatable airbag cushion; and

(c) wherein at least some of said ~~second~~ yarns in said first and second woven fabric layers are provided in a plain weave pattern, said plain weave pattern extending across said first and second joints.

26 - 28. (Cancel)

29. (Currently Amended) The airbag cushion of claim 25 wherein between about two and about eight ~~first~~ yarns are provided ~~in said first direction~~ between said first joint and said second joint for each of said layers.

30. (Original) The airbag cushion of claim 29 wherein four first yarns are provided in said first direction between said first and second joints.

31. (Currently Amended) An inflatable airbag cushion comprising a fabric having woven in joint seams with substantially float-free yarn construction along the woven in joint seams, comprising:

(a) a first woven fabric layer and a second woven fabric layer, said first and second woven fabric layers being interconnected to each other, each of said first and second layers having:

i) a plurality of first yarns extending in a first direction and

ii) a plurality of second yarns extending in a second direction, said first and second yarns being woven together;

iii) said second direction being perpendicular to said first direction;

iv) wherein at least some of said second yarns are shared between said first layer and said second layer;

(b) a first joint and a second joint, said first and second joints extending generally parallel ~~and in said first direction~~ to each other, said first and said second joints comprising regions of yarn interconnection and crossover between said first and second woven layers, wherein between about 2 and about 12 ~~generally parallel first~~ yarns are provided ~~in said first direction~~ between said first and second joints in each of said layers; and

(c) ~~said second yarns being positioned within both of said first and said second layers,~~
~~said second~~ yarns forming ~~a crossovers~~ from one of said first and second layers to the other of
said layers at said joints, further wherein said crossovers isare provided such ~~that said second~~
yarns assumes a plain weave pattern; wherein in said crossovers and across said joints said
second yarns pass alternatively over and then under successive first yarns, thereby forming a
substantially gas impermeable seam at said joints.

32. (Original) The inflatable airbag cushion of claim 31 wherein said seams of said cushion are
formed of jacquard construction.

33. (Original) The inflatable airbag cushion of claim 32 wherein said seams are curved.

34. (Currently Amended) The inflatable airbag cushion of claim 31 wherein ~~a plurality of joints~~
~~are provided along said first direction, further wherein~~ the number of first yarns between
successive joints is between about two and about eight for each of said layers.

35. (Currently Amended) The inflatable airbag cushion of claim 34 wherein the number of first
yarns between successive joints is between about two and about four for each of said first and
second layers, ~~thereby providing a total of between about four and about eight first yarns~~
~~between successive joints for the first/second layer structure.~~

36. (New) An inflatable airbag cushions comprising fabric woven having a first and second
layer. Joint seams are provided to form at least one inflatable pillowed chamber comprising

(a) a first woven fabric layer and a second woven fabric layer, said first and second
woven fabric layers being interconnected to each other, each of said first and second layers
having:

i) a plurality of first yarns extending in a first direction and

ii) a plurality of second yarns extending in a second direction, said first and second yarns being woven together;

iii) said second direction being perpendicular to said first direction;

iv) wherein at least some of said second yarns are shared between said first layer and said second layer;

(b) at least two joint seams that run substantially parallel to each other and are of close proximity to each other.

(c) said joint seams being separated by both the first and second layer portion consisting of not more than 12 warp or weft yarns per layer.

(d) each of said joint seams being formed by weaving the warp and/or weft yarns that are previously contained in the first layer, and using them to form the second layer. Simultaneously the yarns previously contained in the second layer are used to form the first layer, thus to form a crossover.

37. (New) The cushion of Claim 10, wherein said first and second interconnected joints run in the warp direction.

38. (New) The cushion of Claim 10, wherein said first and second interconnected joints run in the weft direction.